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EVIDENCES
OF
THE UTILITY
OF
VACCINE INOCULATION:

INTENDED FOR THE
INFORMATION OF PARENTS.

DEDICATED (BY PERMISSION)
TO THE
RIGHT HONORABLE LORD SOMERVILLE.

BY
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TO THE
RIGHT HONOURABLE
LORD SOMERVILLE.

MY LORD,

THE zeal and ability which your Lordship has evinced, and the honourable share you have taken, in various objects of useful Science and National Utility, will confer reputation on every pursuit which is favoured with your patronage. But I have peculiar satisfaction in being permitted to dedicate to your Lordship this effort to convey popular information

information on the important subject of Vaccine Inoculation; a discovery of which you have been, from its earliest introduction, an ardent promoter, and to the distinguished Author of which you have extended your personal friendship.

I am, my Lord,

Your Lordship's

Respectful and obliged Servant,

THOMAS CREASER.

BATH, JAN. 21, 1801.

For PARENTS, and those concerned in the PRESERVATION OF YOUTH, this attempt to place in a popular and intelligible point of view the principal Facts and Arguments in favour of VACCINE INOCULATION, is intended.

THE numerous applications which I have received to define the advantages, and to explain the circumstances, of Vaccine Inoculation, have impressed me with a conviction, that the subject is imperfectly understood by that part of the public which is most deeply interested in its adoption. However extensive and zealous have been the professional enquiries which this signal discovery has excited, and altho' the literary productions concerning it have been numerous, yet no adequate information is hitherto diffused among extra professional readers. Whatever differences of opinion may subsist concerning the propriety of promulgating medical and physiological knowledge amongst Society at large, none such can arise on the present
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lent subject, as its intrinsic advantages and its grounds of preference are cognizable by all. An early interest in this invaluable improvement, and the opportunities which intimate communication with the ingenious Discoverer has conferred, of repeatedly witnessing all the phenomena of the Cow-Pox, have induced me to aim at the supply of this deficiency.

Little more than two years have elapsed, since Dr. Jenner announced to the public, the singularly curious and beneficial effects of Vaccinæ Inoculation. His conclusions were formed from experiments suggested by facts founded on the unerring basis of experience. From this source we have derived the application of bark, mercury, opium, and almost all the most powerful agents of medical science. Extensive and impartial trials of the truth of Dr. Jenner's positions were immediately instituted, and they have been prosecuted with avidity by men of the first talents, independent of concert or co-operation. The result is, that although the Inoculation of the Cow-Pox is one of the boldest and most direct innovations on preceding practice, and, as such, has had to encounter all the impediments which are usually opposed to novelty, by the operations of scepticism, prejudice and interest, yet its asserted and almost unparalleled advantages have been realized in their highest extent, by a mass of irresistible evidence. It is truly extraordinary, that in a measure so perfectly original, and which has been so immediately submitted to the test of extensive experiment, subsequent investigation

investigation should have tended merely to confirm the positions of the original proposer. It is a law of the human mind to prefer good to evil, provided it be competently informed of their difference, and that it is not under the influence of erroneous judgment or habits. Of the quantity of evidence existing to demonstrate the highly preferable nature of the Vaccine to the Small-Pox Inoculation, the public want only accessible means of information.

It will be necessary previously to enter into the history of the natural Cow-Pox, as distinguished from the same disease when applied by Inoculation, and as the origin of the latter. The cow, though in general an healthy animal, is subject to this and a few other diseases.* This disorder

* If, in a popular work, we may be allowed to digress a little into the pathology of animals, it may be observed, as a curious fact, that their predispositions to disease are of the specific kind. The Horse is liable to Broken-Wind, Farcy, Glanders, and Grease, exclusive of some local diseases, the greater number of which do not arise from original or natural causes, but from the unnatural and violent situations to which he is exposed, whilst administering to the utility and luxury of man. The Sheep is disposed to the disease termed the Rot, and to Hydatids of the Brain. The Dog to its peculiar affection called the Distemper, to Mange, and Hydrophobia. The Cow is particularly liable to the disease of which we are treating, and to the Yellows, which are similar to the human Jaundice. Much physiological consideration arises out of these observations; not only the morbid secretions of the same animal are capable of conversion and mutual change, but also

has been known in various counties of this kingdom and in Ireland.† The tradition of those extraordinary prophylactic powers, which it is now found to possess against the Small-Pox, has been received for a series of time, wherever the disease itself has been known. In the hun-

also the same morbid poison, applied to different animals, seems to produce not a similar and specific disease, but the disease to which the animal, from constitution and structure, is pre-disposed. It is now confirmed, according to Dr. Jenner's original theory, that the Cow-Pox originates in a morbid poison communicated from the greasy heel of the horse; yet this poison does not produce the Cow-Pox in the human subject, till it has been received by, and transmitted from, the cow. My friend Mr. Coleman, Professor of the Veterinary College, has created Glanders by inoculating the Membrane of the nostrils of the horse from its Farcy Buds, as they are termed; i. e. inflamed and ulcerated lymphatics; the same effect took place, *vice versa*, from Glanders to Farcy; and, which is truly singular, Dr. Jenner informs me, that dogs, inoculated with Vaccine matter, acquire their peculiar affection, termed the Distemper. These speculations lead us to a vast field of consideration concerning the modifications of morbid poisons, and they teach us also not to regard the introduction of them as hazardous on another class of animals, when they become remedial alternatives.

† " My researches have been hitherto confined to a small portion of the western part of this country, (Cork) where I have met with 13 instances of people who had gone through the Cow-Pock, and were afterwards exempt from the Small-Pox."—Letter from Dr. Barry of Cork to Dr. Pearson.—Medical and Physical Journal, No. xxi.

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dred of Berkeley in Gloucestershire, it first arrested the attention of Dr. Jenner, and is thus described by him:—
 “ This disease has obtained the name of the Cow-Pox. It appears on the nipples of the cow, in the form of irregular pustules. At their first appearance, they are commonly of a palish blue, or rather of a colour somewhat approaching to livid, and are surrounded by an erysipelatous inflammation. These pustules, unless a timely remedy be applied to them, frequently degenerate into phagadænic ulcers, which prove extremely troublesome. The animals become indisposed, and the secretion of milk is much lessened. Inflamed spots now begin to appear on the hands of the domestics employed in milking, and sometimes on the wrist, which quickly run on to suppuration, first assuming the appearance of the small vesications produced by a burn.” “ Absorption takes place, and tumours appear in the axillæ. The system becomes affected;” “ but

Dr. Jenner ingeniously conceives, that the domestication of animals may have been a source of disease to man. “ The deviation of man from the state in which he was originally placed by nature, seems to have proved to him a prolific source of diseases. From the love of splendour, from the indulgences of luxury, and from his fondness for amusement, he has familiarised himself with a great number of animals, which may not originally have been intended for his associates. The wolf, disarmed of ferocity, is now pillowed in the lady’s lap. The cat, the little tyger of our island, whose natural home is the forest, is equally domesticated and caressed. The cow, the hog, the sheep, and the horse, are all, for a variety of purposes, brought under his care and dominion.”

—Jenner’s Enquiry.

In

what renders the Cow-Pox virus so extremely singular, is, that the person who has been thus affected, is for ever after secure from the infection of the Small-Pox; neither exposure to the variolous effluvia, nor the insertion of the matter into the skin, producing the distemper." For cases illustrative of this extraordinary fact I refer to the appendix.

It may now be affirmed, on the most extensive induction of facts known from time immemorial, and as the result of the most rigorous and severe examination, that the power of the Cow-Pox, (when received in a certain way) to render the system for ever insusceptible of the Small-Pox, is a proposition completely demonstrated. There is certainly not a law in the whole circle of physical sciences which stands on a firmer basis, nor an Aphorism in the medical art more extensively founded, than this—"that the Cow-Pox excludes the Small-Pox." Since the days of Lord Bacon, argument has not been allowed in natural philosophy, further than in the way of deduction from fact and experiment; and by this rule of philosophising, the powers of the Cow-Pox may be fairly admitted. An analogous application of this important fact was made by Dr. Jenner in the year 1796, who inoculated several patients with matter from infected cows; the effects produced were perfectly similar in kind, though differing in degree from those of the natural Cow-Pox, and they had equal power in producing subsequent insusceptibility of the Small-Pox.†

† See Jenner's Enquiry.

In this respect a striking similarity is perceivable between the inoculated Cow-Pox and Small-Pox, compared with their natural forms. Since the period of Dr. Jenner's first Inoculations, to the present, the Vaccine Inoculation has been diffused beyond former examples of the reception given to innovations on established practice. An institution has been formed in London, under the patronage of a branch of the Royal Family, for its gratuitous administration. It has been introduced into the army and navy. Several large cities, as York, Manchester, &c. have propagated it universally amongst their poor; and by the medical faculty it has been widely adopted, though with very different degrees of zeal and confidence. Intelligent and philanthropic gentlemen of rank have lent not only their influence, but their personal aid in its introduction and diffusion.* It has besides been practised extensively in America,† and in different states and cities on the continent of Europe.

To enlarge on the mischief and devastation perpetually accruing from the Small-Pox, is nearly superfluous to a society possessing humanity and intelligence. Its extermination has engaged the attention and the active endeavours of eminent physicians. A society was instituted at

* Letter from Mr. Fermor to Dr. Jenner.

† See Pamphlet on Kine-Pox, by Professor Waterhouse, of Cambridge University, America.

‡ See Haygarth's sketch of plan to exterminate casual Small-Pox.
Chester,

Chester, on a plan of Dr. Haygarth's, in the year 1778, for the diminution of the casual Small-Pox, and notwithstanding obstacles opposed by the want of general submission to periodical Inoculation, (which formed a part of the plan) its success in checking the ravages of this disease was conspicuous. Dr. Haygarth has expressed himself thus in a letter to Dr. Cappe of York; "that an introduction of the Vaccine still more than that of the Variolous Inoculation would effectually promote the great object of his publications." It is to the *poor* that the casual Small-Pox is principally formidable and destructive; and it is aggravated by their mischievous and absurd methods of treating the disorder. The practice of Inoculation, although it diminishes in a vast degree the proportionate fatality among those who undergo the Small-Pox, is yet justly supposed to have more widely disseminated this active contagion. The more opulent and well-informed have, indeed, abandoned long since their objections to Variolous Inoculation, and have secured themselves by the lesser dangers attached to it; but in so doing, they have probably inflicted more numerous sources of the disease on those possessing less intelligence.* The average of deaths from

* The propagation of a destructive disease amongst those whose prejudices and ignorance resist the adoption of a preventive, may have withheld conscientious persons from the Inoculation of the Small-Pox, but the application of Cow-Pox obviates every scruple.

Small-Pox,

Small-Pox for 75 years, within the bills of mortality in London, has annually exceeded 2020; the total amount is 151,570. If the population within the bills of mortality may be stated at 1,000,000, which is nearly the calculation, the proportion of deaths is as one in 500. There is reason to believe that the mortality from Small-Pox through the whole Island is in like proportion, or rather exceeds this estimate.* The inhabitants of Manchester, Liverpool, and Chester, were enumerated in the year 1773; the total amount was 78,271, and the annual deaths from Small-Pox were on an average 381; † therefore one person died of this disease every year in 205 $\frac{1}{2} \frac{66}{91}$ of the inhabitants. The cause of this lesser mortality in London may be, that the population is supported in great measure by the influx of new settlers, who have gone through the disease. In cities where the inhabitants are more stationary, we may assume, as an average of deaths from Small-Pox, the calculations formed from the cities of Manchester, Liverpool, and Chester. Bath is estimated to contain a stationary population of 24,000 people, ‡ the average number of annual deaths in this city from Small-Pox must therefore

* The Directors of the York Dispensary have calculated, from pretty certain data, that a general Inoculation of Cow-Pox would save the lives of 45,000 persons annually.

§ Haygarth's Sketch of a plan to exterminate the casual Small-Pox, vol. I. page 142.

† See Warner's History.

be 116 and nearly $\frac{7}{8}$. † The Small-Pox is communicated through the atmosphere by the attachment of its contagion to a variety of bodies capable of retaining and conveying it. This scourge of the human race was brought from the East to Europe, and from thence has been spread to the Poles. “The Danes carried it to Greenland, the Spaniards poured its ravages, more dreadful than their arms, through the unhappy country of Peru; in the single province of Quito, 100,000 persons died of the Small-Pox, when it first appeared in that country.” †

† By the information with which I have been favoured by the Rev. Mr. Sibley, rector of the parish of Walcot, in this city, it appears, from the ratio of population in that parish, that the proportion of deaths in the whole city is more considerable than in the calculation quoted;—it is thus :

SIR,—On looking over the Register I find that 58 persons died of Small-Pox in the year 1799, and 25 in the year 1800.

I am, Sir,

Your very humble servant,

Jan. 8th, 1801.

J. SIBLEY.

On looking further back I find as follows :

Died of the Small-Pox in 1798	11.
1797	31.
1796	90.

The Rev. R. Warner, curate of St. James's, also informs me, that the mortality of Small-Pox in that parish is in more than the above proportion. In Bath, as in all large cities, the Small-Pox is constantly epidemic amongst the lower classes, in confined situations.

† Dr. Cappe's Let. on Cow-Pox.—York Herald, Sept. 5, 1800.

Much as we are indebted to Inoculation for disarming Small-Pox of many of its terrors, yet this valuable improvement is not only still fraught with danger, but is confessedly inadequate to its annihilation, whilst the present dispositions of the majority of mankind exist. It is calculated, on extensive data, that upwards of one in 200 die of inoculated Small-Pox; and to render it thus comparatively safe, both medical treatment, and careful selection of age, period, and season, are indispensable. Wherever a fatal event occurs, the distress and regret is excessive from the disease having been voluntarily, though justifiably, adopted.

Here let me appeal to every parent or protector interested in the guardianship of youth. If you are ever so disposed to the Inoculation of the Small-Pox, there are periods, as those of dentition, and during the influence of other diseases, when its dangers are so increased as to render it no beneficial commutation. Inoculation of the Small-Pox in early infancy, an adoption which the danger of casual Small-Pox has made almost compulsory, is much more frequently fatal than at advanced periods. Till your infants can be rendered insusceptible of this disease, they are hourly exposed to the action of a pestiferous and universally-diffused contagion, which no precaution can exclude. Every exposure for the purposes of exercise or recreation is fraught with danger; and visits to large cities from the country are attended with the highest risk. The Small-Pox Inoculation is a measure, at the best, of delibe-

ration, of anxiety, and of critical management; frequently severe, and occasionally destructive. By the adoption of Cow-Pox you have an alternative mild and effectual; seldom attended with suffering, and never with danger; incapable of communication by contagion, eligibile at any age or period, and conferring permanent security against Small-Pox.

The progress of the Inoculated Cow-Pox is uniform and well defined. It is communicated by a puncture as slight as that employed in the Inoculation of Small-Pox. On this spot, by the third day, a slight redness is perceptible; this is gradually augmented till the eighth day, at which time the disorder of the system (when any is produced) appears; it is much more frequent that no general indisposition is caused, especially in infants. Where indisposition occurs, it is that of slight fever, head-ach, &c. existing only for a few hours. There is sometimes pain in the inoculated arm. After this, the inoculated part extends, and is surrounded by a diffused redness; this gradually becomes fainter, and a brown scab forms, which spontaneously separates; by the 14th or 15th day the progress is complete, and the disease is finished. If ever the inoculated part becomes exposed to extended soreness, it is directly within the power of medical applications, and admits of immediate relief. From the concurring testimonies of unconnected observers, it appears also, that, provided the formation, progress, and termination of the pustule on the inoculated arm be perfect and characteristic,

it is immaterial whether the constitutional symptoms be produced at all, or whether they be more or less considerable.

It is a consideration which applies peculiarly to this part of the history of Cow-Pox, and it cannot be too strongly inculcated, that this disease, though light and trivial in its operation, is one of peculiar nicety in its laws. To give the inoculated Cow-Pox that effect on the human animal œconomy, which renders it insusceptible of Small-Pox, requires much knowledge of its phenomena. It is not within the plan of this work to enter into those details on the nature of disease, which it is the peculiar duty and province of medical men to become acquainted with, but a regard to the interests of society, and to the reputation of Vaccine Inoculation, renders it a duty to oppose the very dangerous opinion that its management may be committed to uninformed hands.

To exhibit in a collected view the principal laws and advantages of the Cow-Pox, the following positions are stated as inductions from numerous facts.

1st. *It for ever excludes the susceptibility of Small-Pox.*

The proofs of this position are in the general traditions to this effect founded in experience; in the many and well-authenticated cases of natural Cow-Pox, excluding Small-Pox infection, and in the vast mass of evidence arising from the inoculated cases of Cow-Pox which have afterwards resisted Variolous contagion.*

* See Appendix.

2d. *The Cow-Pox is a slight disease, and never fatal*

This is also proved by the same evidence. In the many thousand cases reported, but which probably form only a very small part of those inoculated, only one has died, and this was in the first 600 inoculated by Dr. Woodville. It has since been admitted by himself that there were effects produced in the first Inoculations at the Small-Pox Hospital, which do not belong to pure Cow-Pox.

3d. *The Cow-Pox is not contagious.*

Tradition, observation, and the concurrence of all the reports, prove that the Cow-Pox is not communicable by the atmosphere, clothes, common contact, or the usual modes of infection. Hence arises a most inestimable advantage in the extension of this disease to those only who are intended for its reception. In the farm-houses, when the servants are infected, they do not give it to the uninfected, though they sleep with them. Mr. H. Jenner has inoculated children at the breast, whose mothers had not gone through either the Small-Pox or Cow-Pox. One woman he inoculated about a week previous to her accouchement, that the infant might be the more fully exposed to the pustule, but, as in the former instances, no infection was given, although the child frequently slept on the arm of its mother.—Jenner's Continuation.

4th. *The Cow-Pox does not excite, or call into action, other diseases.*

Various scrofulous and other affections must be admitted frequently to follow both the natural and inoculated
Small-

Small-Pox. Modern opinions have ascribed such effects to a power in the Small-Pox of calling forth latent and dormant diseases into action, and not to the communication of such diseases along with the Small-Pox. From the experience already attained, the Cow-Pox seems exempt from this tremendous objection; and if daily accumulating observations confirm it to be so, another and most important ground of superiority is added. On this point Dr. Jenner thus expresses himself, “ This enquiry is not now so much in its infancy as to restrain me from speaking more positively than formerly on the important point of scrofula, as connected with the Small-Pox. Every practitioner in medicine who has extensively inoculated with Small-Pox, or has attended many of those who had the distemper in the natural way, must have seen scrofulous affections in some form or other, sometimes rather quickly shewing themselves after the recovery of the patients. Conceiving this fact to be admitted, as I presume it must be by all who have attended to the subject, may I not ask, whether it does not appear probable that the general introduction of the Small-Pox into Europe, has been among the most conducive means in exciting that formidable foe to health? Having attentively watched the effects of the Cow-Pox in this respect, I am happy in being able to declare, that the disease does not appear to have the least tendency to produce this destructive malady.”—
Jenner's Continuation.

5th. *The Cow-Pox is admissible at any age.*

In the letter of Mr. Fermor to Dr. Jenner are instances of successful Inoculation from 3 months old to 80 years. Similar instances are to be found in other reports.—“ Mr. H. Jenner, at my request, inserted the Vaccine Virus into the arm of a child 20 hours old. The child went through the disease without apparent illness, yet was found effectually to resist the action of the Variolous matter with which it was afterwards inoculated.”—Jenner’s Further Observations.

The principal positions concerning the inoculated Small-Pox and Cow-Pox may be thus contrasted.

SMALL-POX.

Choice of season and age essential. Dentition, and many other circumstances, unfavourable.

Previous course of medicine generally employed.

Fever previous to eruption, the same when the eruption is complete. Disorder existing from the 7th to the 15th or 16th day, with many painful symptoms.

Fatal at least once in 200 instances.

COW-POX.

Applicable at any age or period.

None necessary.

Disorder in general scarcely perceptible, never severe, and existing only a few hours.

Never fatal.

Highly

SMALL-POX.

Highly contagious. Children often separated from their families and parents to avoid communication.

Habit enfeebled after the disease, and medicine again exhibited.

COW-POX.

Not contagious.

Health as before Inoculation.

It is due to the satisfaction of the public mind, and to the interests of truth, that we comment upon the objections opposed to Vaccine Inoculation.* The force

* In a pamphlet lately published here, entitled "*A Conscious View of proceedings in Vaccine Inoculation, &c.*" (a production, notwithstanding its imposing title, certainly not possessing a claim to distinct reply) the author has involved Small-Pox Inoculation, Vaccine Inoculation, and even the luminous doctrines of modern Chemistry, in a tide of invective apparently dictated by an excess of anti-innovation zeal. On the latter science, it is probable, from the internal evidence of the remarks, that this gentleman's information qualifies him much better to exclaim than to reason. The utility of Small-Pox Inoculation, from the period when it was adopted, up to the discovery of its better substitute, the Cow-Pox, may be safely left to the admitted sense of past times. On the Vaccine Inoculation, after much infuriated declamation, the author has summoned up a few adverse cases, long since known, long since replied to, and concerning which, most of the editors themselves, Dr. Jas. Sims, Messrs. Cooke and Thornton, have honourably and publicly recanted their opinions.

force

force and extent of these fall infinitely short of those opposed to the Small-Pox Inoculation, on its first introduction. For this Dr. Woodville's admirable History of the Small-Pox may be consulted. These objections consist in the excitement of prejudiced feeling against a disease of quadrupedial origin,* and in the alledged incompetency of the Cow-Pox to render the system insusceptible of Small-Pox. In reply to the first† it may be merely observed, that the perversion of understanding must be excessive which can revolt at the participation of disease with an animal whose solids and fluids form so large a part of our sustenance from infancy to old age; whose secretion is esteemed the most salutary nourishment in health, and a restorative in disease; nay, whose respiration has been conceived a beneficial remedy in one of the most fatal of human maladies. To the asserted inefficiency of Cow-Pox we must first object that the nature of the evidence by which persons are supposed to have had first Cow-Pox, and afterwards Small-Pox, is utterly inad-

* See Moseley's History of Sugar.

† "As to one particular objection to the new Inoculation, on the score of the origin of the virus in the cow, and the offensive aspect of the eruption, if usefulness be here the object of contemplation, a gem will be seen under a deformed exterior,

"Which, like the toad, ugly and venomous,

"Wears yet a precious jewel in his head."

Pearson's Letter, Med. and Phys. Journal, No. xxiii.

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missible. Is the report of a patient, that he once had this or that disease, conclusive proof? Has not every medical practitioner been informed by different persons, that they had suffered peculiar diseases, which further examination has shewn to have been essentially different? Even present diseases are frequently misconceived; for instance, Itch, Chicken-Pox, Measles, Cancer, &c. No case of this kind has yet been authenticated, where cognisance was taken of both diseases by a competent judge of the characters of the Vaccine and Variolous Pustule, and no other testimony is entitled to reception. The assumption that Cow-Pox is only a temporary preventive of Small-Pox is perfectly hypothetical and gratuitous. The traditions and cases from which the anti-variolous powers of the Cow-Pox are derived, prove that the insusceptibility is permanent; and the contrary doctrine is less consistent with other analogies.

The cases in which the Small-Pox was supposed to have followed the Cow-Pox, have been for some time before the public, and no adverse case has since been presented; whilst the positive evidence in its favour has been accumulating with unexampled rapidity. To the cases themselves the observations of Drs. Jenner and Woodville are most applicable.

“On these cases I shall for the present suspend any particular remarks, but hope that the general observations I have to offer in the sequel, will prove of sufficient weight to render the idea of their ever having had existence but

as cases of spurious Cow-Pox, extremely doubtful." Dr. Jenner then defines conditions and sources of spurious Cow-Pox.—Jenner's Further Observations.

"It has been asserted that persons have had the Small-Pox after having been affected with the Cow-Pox;" "but all these, as far as I have seen have been very defective in not affording sufficient proof that the affection supposed to have been the Cow-Pox was in reality that disease."—Woodville's Reports.

That future errors and apparently adverse cases will arise in an undertaking so recent and yet so extended, I am not so sanguine as to doubt. I believe, if they occur, it will be for want of knowledge of, or attention to, the due and complete character of the Pustule, and the selection of the virus at a proper period. These form no impediments to the adoption of the disease, but are incentives to caution. I can now scarcely deem it possible that a mind can exist so torpid as to view with indifference the certain and inestimable benefits to mankind of Vaccine Inoculation. To the scrupulous admission of new suggestions no censure is due; but for the undeliberative rejection of so invaluable a remedy, it is difficult to find an apology. It may be ranked with the highest which the genius or experience of man have suggested, or the annals of the medical art have recorded. Let me grant to its opponents that exceptions may occur to the general law of the Cow-Pox excluding the Small-Pox; such have already occurred in the Small-Pox itself, unequivocal cases

cases having existed where it happened twice to the same person; but will such deviations in a small proportion (should such, contrary to preceding experience, be the case) diminish its general value, or invalidate its agency in annihilating and extinguishing that bane of human existence, the Small-Pox? An evil, which cannot be more forcibly described than in the language of Dr. Jenner; "as every hour devouring its victims; a disease that has ever been considered as the severest scourge of the human race."

APPENDIX.

CONTAINING CASES AND TESTIMONIALS IN FAVOUR OF
VACCINE INOCULATION.

SEVEN cases of natural Cow-Pox appear in Dr. Jenner's Enquiry, in which the interval of years between the infection of Cow-Pox and the inoculation of Small-Pox, was from 10 to 53. All resisted the Small-Pox Inoculation. —See “Enquiry into the Effects of the Variolæ Vaccinæ.”

Five cases of natural Cow-Pox appear in a letter from T. Fermor, esq; to Dr. Jenner, in which the interval of years between the existence of Cow-Pox and the inoculation of Small-Pox was from 3 to 10. One of the parties nursed his own family in the Small-Pox without receiving infection, 27 years after having had the Cow-Pox.

The same gentleman also gives the following result of a great number of Inoculations:

With Cow-Pox in all 362.

With Small-Pox afterwards 173.

During

During the course of these Inoculations upon so considerable a number of different subjects of all ages from 11 days to 75 years, no Pustule appeared on any of them but on the inoculated part, except in two instances, a single pustule on the forehead of one, and upon the arm of another. No sickness of any consequence ensued, nor any loss of time from ordinary avocations. "The disorder was not communicated by contagion to any who refused to submit to its Inoculation."—Fermor's Letter to Dr. Jenner, p. 30.

Dr. Marshall, late of Eastington, Gloucestershire, in a letter to Dr. Jenner, (now in my possession) after enumerating 188 cases of Inoculated Cow-Pox, concludes thus:

"Upon the above cases I have hardly any other remark to make, than the disease in all was so mild, and required so little attention, that in no one instance was any person prevented from following their ordinary employment; and indeed many of them hardly found any constitutional affection whatever, but nevertheless effectually resisted all attempts to inoculate them with Variolous Matter."

In a subsequent letter Dr. Marshall says: "Since the date of my former letter, I have continued to inoculate with the Cow-Pox Virus." "Including the cases before enumerated, the number now amounts to 423. It is sufficient to observe, that I noticed no deviation in any respect from the cases I formerly adduced."—Jenner's Continuation, page 156.

From

From Dr. Woodville, physician to the Small-Pox Inoculation Hospital, now almost entirely dedicated to Vaccine Inoculation:

“ It appears from my last publication on this subject, written about six months ago, that the number of persons who had then received the Vaccine Infection at the Hospital, exceeded 2500; since that time, upwards of 1500 have been inoculated for the Cow-Pox at the same place, and of these I have a report to present, similar to that stated by me in July last, viz. “ With none of the patients did the infection occasion a severe disorder, or excite one alarming symptom.”—Woodville’s Letter, Med. and Phys. Journal, No. 23.†

Extract of a letter from Mr. Gunning, surgeon, of the Vaccine Inoculation Institution, Warwick-street, Golden-square, London, Jan. 3d, 1801:

“ You may with confidence report that upwards of 1000 have lately been inoculated at the Institution, and the Small-Pox Hospital, (now almost entirely dedicated to the Vaccine Pock) and that great numbers have been again inoculated with Variolous Matter.”

Extract of a letter from Mr. Cline, surgeon and anatomist in London, to Dr. Jenner:

“ I think the substituting the Cow-Pox poison for the Small-Pox promises to be one of the greatest improvements ever made in medicine; and the more I think on the subject, the more I am impressed with its importance.”
— Jenner’s Continuation.

Extract

Extract of a letter from Mr. Dunning,* surgeon, Plymouth-Dock, to the author, Jan. 3, 1801:

“ More than a thousand subjects have been *vaccinated* in this neighbourhood during the last year. Some hundreds of them have fallen to my share. Complete success has been invariable in every case, where the Vaccine character has been unequivocally expressed. With a very few exceptions, the indisposition has been none at all, or the least imaginable, and I know of no shade of accident that can fairly be attributed to the new practice. In one child a very general and obstinate cutaneous complaint, which had previously resisted much external and internal medicine, very soon disappeared after vaccination. Health and firmness have shortly succeeded it in several weakly children, under my own observation, and I have heard of many similar occurrences; this has so often and so strikingly happened, that it has more than once been proposed to me to vaccinate sickly children.”

Extract of a letter from Dr. Trotter, physician to the fleet, (Medical and Physical Journal, No. 23:)

“ The inoculation of the Vaccine disease is making rapid progress in the fleet. This business is much facilitated by the kind attention with which the matter is supplied to our surgeons as they arrive from sea, by Messrs. Dunning and Little, two eminent surgeons in this town.”

“ Mr. Stephen Hammick, of the Royal Hospital, is also entitled to his further acknowledgment for similar kindness.”

* Author of a Pamphlet on Cow-Pox. “ Since

“ Since the publication of my second volume of *Med. Nautica*, not less than eleven ships of the line, besides frigates, have imported the Variolous contagion.”

DECLARATION of PHYSICIANS *and* SURGEONS
in LONDON.

“ Many unfounded reports having been circulated, which have a tendency to prejudice the public mind against the Inoculation of the Cow-Pox, we, the undersigned Physicians and Surgeons, think it a duty to declare our opinion, that those persons who have had the Cow-Pox, are perfectly secure from the infection of Small-Pox, provided such Infection does not exist in the system at the time of the inoculation for the Cow-Pox.

“ We also declare, that the inoculated Cow-Pox is a much milder and safer disease than the Cow-Pox.

William Saunders, M. D.	Robert Batty, M. D.
Matthew Bailile, M. D.	R. J. Thornton, M. D.
Henry Vaughan, M. D.	Richard Denison, M. D.
Maxwell Garthshore, M.D.	N. Hulme, M. D.
John Coakley Lettson, M. D.	G. Blane, M. D.
James Sims, M. D.	Wm. Blackburne, M. D.
John Sims, M. D.	Sir J. M'Namara Hayes,
William Lister, M. D.	bart. M. D.
Robert Willan, M. D.	Andrew Thynne, M. D.
C. Stanger, M. D.	Edward Fryer, M. D.
Alex. Crichton, M. D.	Sayer Walker, M. D.
Thomas Bradley, M. D.	Mich. Underwood, M.D.
	Thomas

Thomas Denman, M. D.	Thomas Garnett, M. D.
John Squire, M. D.	John Gibson, M. D.
Richard Croft, M. D.	Henry Cline
Edward Ford	Samuel Chilver
Astley Cooper	J. M. Good
John Abernethy	James Horsford
Joseph Hurlock	Francis Knight
William Blair	James Leighton
James Moore	James Gilder
Thomas Paytherus	John Griffiths
Thomas Pole	James Higgins
J. W. Phipps	Lewis Leese
John Ring	William Lynn
James Simpson	John Mackinder
H. L. Thomas	Jonas Malden
Jonathan Wathen	William Morris
Thomas Whately	Thomas Ralph
G. M. Burrowes	Joseph Millington
David Dundas	Joseph Pearson
Thomas Farquhar	John Rush
Henry Fearon	Stephen Woolwiche."

Resolutions in favour of general Vaccine Inoculation have been entered into at York, Manchester, Leeds, &c. sanctioned by the medical practitioners of the places. To the Manchester resolutions the very respectable name of Dr. Percival is subjoined, and it is further stated, "That two respectable families residing near Manchester have, within

within these few months, inoculated with the Cow-Pox upwards of 800 persons of different ages from two months to 20 years old, with uniform success. They all recovered without suffering any sickness sufficient to confine them a single day. These patients were attended by Charles White, esq; and Mr. B. Gibson, and 20 of the children were, after a proper interval, inoculated with the matter of the Small-Pox without communicating the infection to any of them.”—*Salopian Journal*, Dec. 31, 1800.

Extract of a Report from the Committee on the Vaccine Inoculation at Paris:

“The Vaccine affection appears to them to be of a nature the most benign, and which hardly deserves to be called a malady; not so much as one accident occurred to the hundred and fifty subjects who have been inoculated.”

“The Vaccine Inoculation is no less practicable than exempt from accidents, whatever be the age of the persons on whom it is performed. Infants have been inoculated in the arms of their nurses; others at the age of one, two, and three years to fifteen. Persons of the age of forty, and even fifty years, have also been inoculated, and always with the same success.

“Nineteen subjects submitted to the operation, have been inoculated with fresh pus, taken every time from a Variolous Infant present. The committee, for the purpose of rendering the experiments more decisive, employed in many of the subjects very deep incisions, such as, according

ing to the inoculations, necessarily occasion Pustules. In fourteen the incisions were soon obliterated without any symptom of complaint. In the remaining five the effect can be considered in no other light than as the effect of local irritation, produced by the puncture of the skin."

"These effects coincide entirely with the result of the experiments made at Geneva, by Dr. Odier, and of which he gives an account in a report lately published by the prefect of that department. In six hundred children inoculated with Vaccine matter, the mildness of the disease, its regular and invariable progress, its characteristic of being void of contagion, and the absence of every complaint subsequent to inoculation, were constantly manifested. One very remarkable circumstance at the same time has afforded an opportunity of evincing its preservative effect. An epidemic Small-Pox, of a very malignant kind, having appeared at Geneva, *where upwards of 150 Children were victims to it*, and where 76 more have died within the last month, it was observed that the children who had been inoculated with the Cow-Pox were totally unaffected by the contagion." (Signed)

"THOURET, Director of the Medical School."

The subsequent letter contains a curious fact of the inoculation of the Cow-Pox, 20 years since :

"SIR, Lansdown-Place, Bath, Jan. 7, 1801.

"As I understand you are publishing a few remarks and cases on the Cow-Pox, I cannot withhold that of John Bright, of this parish, a labouring man, whom I sometimes

times employ. About twenty years ago, being then a farmer's boy, his fellow-servant having milked a cow with a diseased teat, became affected with the Cow-Pox, and in a frolic communicated the disease to him by means of a small scratch on his hand. He has since been repeatedly inoculated without producing any appearance of the ordinary disease. His family have since had the inoculated Small-Pox around him, and he has more than once been in the way of the most malignant species of the natural Small-Pox, without any sort of effect upon him.

“I am, Sir, your very faithful

“and obedient servant,

“HENRY WHITE.”